AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

- 1 16 (Canceled)
- 17. (currently amended) A light control apparatus comprising:
- \underline{a} splitting [[means]] \underline{device} for splitting an input signal light to obtain a monitor light which is a part of the input light;
- a photoelectric conversion [[means]] device for converting the obtained monitor light into an electric signal;

an opening and closing degree control [[means]] device for changing the opening and closing degree of an optical transmission path for transmitting the input signal light by directly receiving the electric signal as a drive voltage.

18. (currently amended) The light control apparatus according to claim 17, wherein said photoelectric conversion [[means]] device is one or more semiconductor photovoltaic device.

- 19. (currently amended) The light control apparatus according to claim 17, wherein said photoelectric conversion [[means]] device is one or more semiconductor photovoltaic device having a nipi-type multijunction structure.
- 20. (currently amended) The light control apparatus according to claim 17, wherein said opening and closing degree control [[means]] device is an optical shutter using a micromachine.
- 21. (currently amended) The light control apparatus according to claim 17, wherein said opening and closing degree control [[means]] device is an optical device such as an absorption-type modulator or refractive index-type modulator.
- 22. (currently amended) The light control apparatus according to claim 17, wherein a voltage source is inserted between said photoelectric conversion [[means]] device and said opening and closing degree control [[means]] device.
- 23. (currently amended) The light control apparatus according to claim [[27]] 17, wherein at least two of said splitting [[means]] device, [[means]] device for converting the monitor light into an electrical signal, and [[means]] device for controlling the opening and closing degree of an optical

transmission path based on the electrical signal are disposed on a single planar optical circuit.

- 24. (currently amended) The light control apparatus according to claim 17, wherein said opening and closing degree control [[means]] device comprises [[means]] a device for holding an opened and closed state controlled based on the electrical signal and [[means]] a device for indicating the held opened and closed state.
- 25. (currently amended) A light control apparatus comprising:
- <u>a</u> splitting and photoelectric conversion [[means]]

 <u>device</u> for splitting an input signal light to obtain a signal light which is a part of the input light and converting the signal light into an electric signal; and

an opening and closing degree control [[means]] device for changing the opening and closing degree of an optical transmission path for transmitting the input signal light by directly receiving the electric signal as a drive voltage.

26. (currently amended) The light control apparatus according to claim 25, wherein said splitting and photoelectric conversion [[means]] device is a semiconductor photovoltaic device having a stack-type structure.

- 27. (currently amended) The light control apparatus according to claim 25, wherein said splitting and photoelectric conversion [[means]] <u>device</u> is a stack-type semiconductor photovoltaic device having a nipi-type multijunction structure.
- 28. (currently amended) The light control apparatus according to claim 25, wherein said opening and closing degree control [[means]] device is an optical shutter using a micromachine.
- 29. (currently amended) The light control apparatus according to claim 25, wherein said opening and closing degree control [[means]] device is an optical device such as an absorption-type modulator or refractive index-type modulator.
- 30. (currently amended) The light control apparatus according to claim 25, wherein a voltage source is inserted between said splitting and photoelectric conversion [[means]] device and said opening and closing degree control [[means]] device.
- 31. (currently amended) The light control apparatus according to claim 25, wherein said splitting and photoelectric conversion [[means]] device and opening and closing degree

control [[means]] <u>device</u> are disposed on a single planar optical circuit.

- 32. (currently amended) The light control apparatus according to claim 25, wherein said opening and closing degree control [[means]] device comprises [[means]] a device for holding an opened and closed state controlled based on the electrical signal and [[means]] a device for indicating the held opened and closed state.
- 33. (currently amended) The light control apparatus according to claim 25, wherein said transmission and photoelectric conversion [[means]] device is a semiconductor photovoltaic device having a waveguide structure.
- 34. (currently amended) A light control apparatus comprising:
- <u>a</u> transmission and photoelectric conversion [[means]]

 <u>device</u> for transmitting an input signal light and converting a

 part of the input signal light into an electric signal; and
- \underline{a} cutoff [[means]] \underline{device} for cutting off an optical transmission path for transmitting the input signal light by receiving the electric signal as a drive voltage.